

REMARKS

By the above actions, claims 11 and 13 have been amended and claim 15 has been cancelled. In view of these actions and the following remarks, reconsideration of this application is requested.

With regard to the objection to the drawings, in view of the cancellation of claim 15, this objection has been rendered moot and should be withdrawn.

The sources of the objections to the specification and claim 13 have been addressed in the manner required by the Examiner, the incorrect reference numeral "9" in paragraph [0031] being changed to -8- and the dependency of claim 13 changed to claim 11. Thus, withdrawal of these objections is requested.

Claims 11-15 were rejected under 35 USC § 112 as being incomplete and unclear. In response, claim 11 has been amended in manner that corrects the deficiencies noted by the Examiner so that the claims now clearly relate the recited elements to each other. Accordingly, this rejection should now be withdrawn and such is hereby requested.

All of the remaining claims to the elected invention have also been rejected, to the extent that they were understood by the Examiner, based on the Kober patent under 35 USC § 102. However, with the rewording of claim 1 to make the invention clear, for the reasons set forth below, it should now be apparent to the Examiner that the Kober patent neither anticipates nor renders obvious the present invention.

Before commenting on Kober, the Examiner's attention is directed to the description of the Fig. 1 prior art in paragraph [0029] of the present application, including the problems associated therewith, and to the distinctions of the present invention relative thereto in the following paragraph [0030]. Of particular note is the problem associated with the use of a polyimide film in the prior art and the absence thereof in the present invention. These comments apply equally to a significant difference between Kober and the present invention.

That is, as set forth in amended claim 11, there is no flexible individual layer (polyimide 9 of prior art) between the adhesive medium (7) and the at least one copper foil (8) in the rigid area (2) of the rigid individual layer (4), and an insulating layer (12) is affixed directly to an inner side of the copper foil (8) in the at least one flexible area (3) of the rigid individual layer (4). Additionally, the adhesive medium (7) has an opening in alignment with the flexible area (3) of the rigid individual layer (4), and in the flexible area (3) of the rigid individual layer,

there is no flexible individual layer (polyimide 9 of prior art) between the rigid individual layer and the copper foil.

In comparison, examination of the Kober patent reveals there is a flexible individual layer (“flexible insulating layer (5), which may be a polyimide ... is applied to the rigid circuit board”) and instead of the insulating layer (5) being affixed directly to an inner side of the copper foil (22) in the at least one flexible area (2) of the rigid individual layer (1) with the adhesive medium (7) having an opening in alignment with the flexible area (2) of the rigid individual layer (1) so that there is no flexible individual layer (polyimide) between the rigid individual layer and the copper foil in the flexible area (2) of the rigid individual layer (1), the adhesive layer 7 is interposed between the insulating layer (5) and the copper foil (22) so that there is NO opening in the adhesive medium (7) alignment with the flexible area (column 5, lines 6-13; “Continuous adhesive film (7) ... is applied to cover the rigid layer”) and the flexible individual layer (polyimide 5) IS located between the rigid individual layer (1) and the copper foil (22) in the flexible area (2) (column 4, lines 54-61; “the flexible insulating layer (5) is situated so that it ... extends over the slot (2)”).

Thus, it should be clear that Kober not only does not teach the invention of amended claim 1, but rather teaches away from it.

With regard to the Examiner’s comments with respect to claim 12, it is pointed out that layer 7 is an adhesive layer and contrary to the Examiner’s contention, “a flexible solder resist” as set forth in claim 12 is not an epoxy resin adhesive. That is, while there are epoxy solder resist materials, they are a thermally cured ink or lacquer and not an epoxy resin adhesive. Thus, claim 12 further distinguishes the invention from the disclosure of the Kober patent.

Claim 14 also further distinguishes the invention from the disclosure of the Kober patent in that claim 14 (in conjunction with claim 13 from which it depends) recites that another insulating layer is applied to the outer side of the copper foil at least in the flexible area, and that this other insulating layer is a resist which has been applied to the copper foil. However, the flexible insulating layer 9 that is applied to the outer side of the conductive layer 22 is not disclosed as being a resist material, i.e., a lacquer or ink that can be sprayed or imprinted onto the conductive layer 22, but rather, given that the flexible insulating layer 9 is shown in the drawings with same cross-hatching as the flexible insulating layer 5 and a like thickness, the only logical conclusion to be drawn Kober’s disclosure is that the flexible insulating layer 9 is

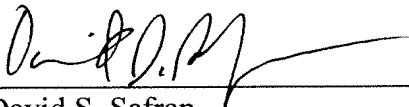
formed of the same materials as the flexible insulating layer 5, none of which is a resist material.

Therefore, for all of the above reasons, it is submitted that the outstanding rejections based on the Kober patent should be withdrawn and such action is requested.

The references that have been cited but not applied by the Examiner have been taken into consideration. However, since these references were not found to be relevant enough by the Examiner to apply against the original claims, no detailed comments thereon are believed to be warranted at this time.

While this application should now be in condition for allowance, in the event that any issues should remain after consideration of this response which could be addressed through discussions with the undersigned, then the Examiner is requested to contact the undersigned by telephone for that purpose.

Respectfully submitted,

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